



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SEP 14 1976

*File in NRC com. +
a copy in Atlas mill
and R. Algom files
ACT-019-003*



Mr. Cleon B. Feight, Director
Division of Oil, Gas and Mining
Department of Natural Resources
1588 West North Temple
Salt Lake City, Utah 84116

Dear Mr. Feight:

Enclosed is the information on reclamation procedures for the Rio Algom and Atlas Minerals uranium mill tailing impoundment areas that you requested in our phone conversation of September 1, 1976.

We hope this information will assist you in your agreement negotiations. Please contact me if you have any questions. My telephone number is 301-492-7427.

Sincerely,

Ross A. Scarano
Fuel Processing & Fabrication Branch
Division of Fuel Cycle and
Material Safety

Enclosure:
As stated

SEP 14 1976

RECLAMATION PROCEDURES FOR RIO ALGOM AND ATLAS MINERALS MILL TAILINGS IMPOUNDMENT AREAS

I Rio Algom

All tailings are to be covered with approximately 18 inches of soil, and seeded with a seed mixture selected on the advice of the Bureau of Land Management or the Department of Agriculture as being the most suitable for the area and conditions.

In a letter to the Atomic Energy Commission (now the Nuclear Regulatory Commission), dated September 17, 1974, Rio Algom estimated the cost of stabilization to be \$238,000 in 1980 dollars.

Using the cost estimates contained in the book, "Tailing Disposal Today," Rio Algom's estimate appears a little low, but a surety arrangement in the amount of \$238,000 would be acceptable to the NRC.

II Atlas Minerals

The details of an acceptable tailings reclamation program are contained in Section 3.1.3 Alternative III of Atlas' Second Supplement to their Environmental Report, dated August 15, 1975.

In general, the program consists of:

1. Reshaping all tailing piles slopes to a 3:1 contour;
2. Applying 12 inches of cover material;
3. Adding municipal sludge to the upper three inches of cover material at a rate of 15 tons/acre; and
4. Planting a mixture of grass species.

Atlas has estimated the cost of this program to be \$616,000.

Using the cost estimates contained in the book, "Tailing Disposal Today,"¹ the reclamation costs could range from \$500,000 to \$900,000 depending on the cost of acquiring and hauling cover material. A surety arrangement in the amount of Atlas' estimate of \$616,000 would be acceptable to the NRC.

¹ Tailing Disposal Today - Proceedings of the First International Tailing Symposium, Tuscon, Arizona, Oct. 31, Nov. 1, 2 & 3, 1972. Edited by C. L. Aplin & George O. Argall, Jr. Miller Freeman Publications.

III Future Requirements

As you are aware, the NRC is preparing a generic environmental impact statement (GEIS) on uranium milling. Any agreement reached between the State of Utah and Rio Algom or Atlas regarding tailings reclamation would be subject to revision as a result of the GEIS and any related rule making.